Published and Copyright (c) 1999 - 2004
All Rights Reserved

Atari Online News, Etc.
A-ONE Online Magazine
Dana P. Jacobson, Publisher/Managing Editor
Joseph Mirando, Managing Editor
Rob Mahlert, Associate Editor

Atari Online News, Etc. Staff

Dana P. Jacobson -- Editor
Joe Mirando -- "People Are Talking"
Michael Burkley -- "Unabashed Atariophile"
Albert Dayes -- "CC: Classic Chips"
Rob Mahlert -- Web site
Thomas J. Andrews -- "Keeper of the Flame"

With Contributions by:

To subscribe to A-ONE, change e-mail addresses, or unsubscribe, log on to our website at: www.atarinews.org and click on "Subscriptions".
OR subscribe to A-ONE by sending a message to: dpj@atarinews.org and your address will be added to the distribution list.
To unsubscribe from A-ONE, send the following: Unsubscribe A-ONE
Please make sure that you include the same address that you used to subscribe from.

To download A-ONE, set your browser bookmarks to one of the following sites:

http://people.delphiforums.com/dpj/a-one.htm
http://www.icwhen.com/aone/
http://a1mag.atari.org
Now available:
http://www.atarinews.org

Visit the Atari Advantage Forum on Delphi!
http://forums.delphiforums.com/atari/

=~=~=~=

~ Apple Sues Tiger Leak! ~ People Are Talking! ~ Happy Holidays!
~ Spam Solutions Needed! ~ Diamond Computer Chips! ~ Thunderbird Winner

~ AOL Tests New Web Mail ~ Suprnova Is Shut Down! ~ Yahoo vs. Google!
~ Google Smacks Santy! ~ Hotmail Dumps McAfee! ~ PSP To Be Hit?

-* $1 Billion Spam Case Award! *-
-* Judge Nixes AOL Spamster Guilty Plea *-
-* European Union Rejects Microsoft's Appeal! *-

=~=~=~=

->From the Editor's Keyboard "Saying it like it is!"
""""""""""""""""""""""""""""

'Twas the night before Christmas...not a creature was stirring, not even an Atari mouse... Another holiday season has arrived. One more holiday dinner trip for us, and then we can relax some more. Nothing Atari-related for me this year, but that's okay. It's been that way for ten years or so. Yet, I miss it, but have managed quite well over the years without any new Atari "toys" to fool around with. The closest thing that I got this year that's Atari-related was a couple of Leisure Suit Larry games for my PC. Boy, I remember the fun I had playing those games on my ST!

Well, we'll make this week's commentary quick this week. I'm sure that most of you will be spending your time making last minute holiday plans and enjoying your X-mas eve. Celebrate responsibly please!

Until next time...

=~=~=~=

PEOPLE ARE TALKING
compiled by Joe Mirando
joe@atarinews.org

Hidi ho ho ho, friends and neighbors. Well here we are, a few days before Christmas, and I find myself with all my shopping done. Will wonders never cease? This is probably a record for me. I'm one of those people who always wait until the last possible moment to get my shopping done. This year, I lucked out and was able to take the week off. I got all my shopping done during the day when most people were stuck at work. The stores were still crowded, but only about half of what I've come to expect for last-minute shopping.

I guess that we can codify it and call it "Mirando's Law".... If there are half as many people in any given store, they will each be TWICE as annoying, obnoxious, and just plain dumb.

I'm left to wonder if the vast majority of people place any importance on the holidays other than having to buy gifts for others and fight crowds.

I realize that I'm putting a decidedly christian slant on this, but the spirit of the holidays is... oh, how do they put it?... Peace on earth, good will toward men. Yeah, that's the ticket.

Now I realize that this same thought has been put forth for generations now... probably reaching deep into the past. Or maybe I'm just getting older and less flexible in my thinking. Nah. That couldn't be it. I'm the same open-minded guy that I've always been. It's the rest of the world that's gotten dumber and dumber. <grin>

Anyway, my shopping got done, and I'm now able to sit here and contemplate the real meaning of the season. This is a holy time for several religions, and I've always hoped that this fact would be the starting point for some of that 'Peace on earth, good will toward men' stuff. But alas, it is not to be... not this year, anyway. Things around the world are probably, despite the pablum we're being fed, as bad as they've ever been. We now find ourselves in a place and time where and when 'compromise' means "shut up and do it my way". That's not exactly what the Founding Fathers had in mind when they crafted the Declaration of Independence. And craft it they did. It was a painstaking process that would not have succeeded at all if it hadn't been for Benjamin Franklin shuttling back and forth between all of the colonies with the latest proposed changes and additions, constantly pushing the idea of compromise and understanding. The process lasted for years until the Declaration of Independence was finally in the form we are now familiar with. THAT is compromise. THAT is tolerance. THAT is what we used to aspire to.

If you haven't already, it's not too late to drop off some food items at the local homeless shelter, soup kitchen, women's shelter or any organization that helps those of us who need it at one time or another. Most of these places wouldn't say no to a donation of a little bit of time to help out either. I confess that I haven't done this myself, so I'm not going to be preachy about it, but if you have the time.... <G>

I apologize to anyone who might take offense at my seemingly heavily religious bent earlier, but it's really a more secular point of view that I'm trying to get across here. "Peace on earth, goodwill toward men" speaks not so much to any deity or religious belief as it does to point a way to helping all of us, both individually and collectively, to getting along in a constantly shrinking world. It brings to mind another phrase made popular by in the very early days of 'the colonies'. This one from Thomas Paine: "If we do not hang together, we shall surely hang separately".

Well, speaking of 'hanging', there are some tree decorations and wreaths that need to be hung up. So let's get to the news, hints, tips and info from the UseNet.

From the comp.sys.atari.st NewsGroup

Last week Sam F. asked about an AES for MiNT:

"How does one use mint without any external aes? What benefits would I get from running just the mint kernal and say...Thing?"

Mark Duckworth tells Sam:

"If you want to run Thing you have to run an AES. Take your pick. You can use AES 4.1 which you can download from numerous FTP sites. I could point you to this. This will get you your basic normal falcon looking desktop except when you launch a program you'll notice the desktop doesn't disappear.

You could use the built in AES but this is hugely unrecommended.

Or you could use Xaaes. It does work.. Trust me. Post specific and concise questions to the group and I will answer them for you.

IMHO MyAES, while having overwhelming potential, is not ready for prime time yet, especially on a falcon. It still has stability issues. Avoid it for anything but playing for now...

You could also use geneva. I've done that before.

The mint.cnf file clearly explains setup procedures. Get things running first by using GEM="path/to/gem" or whatever in your MiNT.cnf. Then you can experiment with loading the full easymint stuff. If you already boot easymint to a login prompt, installation of xaaes should be a simple matter of moving the xaaes folder from the mint binary distribution to C:\mint\1-16-1\xaaes\, modify the video line of your xaaes.cnf, and then run ./xaloader.prg. Tada. It works fine for me."

Jim DeClercq adds:

"One tiny addition. You can run Thing without any added AES, and there is a reason to do this. Thing has Kobold routines in it, and is useful for moving a large number of files.

Where does one get Kobold? I should buy a copy of that, should I ever decide I like Xaaes."

Ronald Hall asks Jim:

"Did they ever fix Kobold for use with Mint? At one time, if I remember correctly, you weren't supposed to use it with anything but 8+3 filename systems/setups. Or is my memory faulty?"

Martin Byttebier tells Ronald:

"From Kobold 3.5 on one can use long file names without problem. However if one uses VFAT partitions Kobold falls back to GEMDOS to perform read/write actions, thus much slower.

As Kobold doesn't offer any speed benefit when used with VFAT I don't use it anymore. Besides that Kobold is a dead project."

Peter West adds:

"You are partly right. Actually Kobold V3.5 handles LFNs, although it switches to GEMDOS mode for LFN-enabled partitions, which

greatly slows it down (since after copying every file the corresponding directory entry is written, so you do not get the normal Kobold speed advantage gained by reading/writing in much larger chunks and writing the directory entries as a batch).

However, V3.5 is only available in German - there never was an official English version as System Solutions were expecting a V4 from Kaktus/ASH which never appeared AFAIK. I have in fact translated V3.51 for my own purposes, and if anyone can send me proof of purchase of a German version V3.5 I could mail the translation to them (though it would, or course, have my registration details)."

Sam F. now posts this about his long hours of tweaking his CT60 with MiNT:

"Finally!!!!! I've got mint and xaaes working...woohoo!!!! The problem I am having now is that when thing127 is being loaded, a message comes up saying thing.rsc cannot be loaded. Any ideas? the .rsc files are right in the same folder as thing.app is."

Nick Harlow tells Sam:

"well done, I hope to do the same over xmas..... wife allowing..."

Martin Tarenskeen give Sam a pointer:

"In mint.cnf or in xaaes.cnf set an environment variable THINGDIR to C \THING\ or wherever your THING directory is."

Steve Sweet gives an interesting alternative option:

"Put a copy in your Home directory and also your system directory, see if it complains then if not delete either one to confirm its favoured location. Or re-point the appropriate path."

Henk Robbers adds:

"Glad to hear you succeeded. XaAES is worth the effort.

I am not sure if I remember correctly cause it has been a very long time since I used Thing. I had the same problem when I used it the first time. It might have to do with the HOME variable. If there is a HOME variable, Thing looks there in stead of in its own directory."

Martin Byttebier tells Henk and Sam:

"Thing doesn't look at the home dir I think.
But you must set the THINGDIR variable in xaaes.cnf

Mine looks like this:

#---------- Thing -----------

```
#
setenv AVSERVER THING
setenv FONTSELECT THING
setenv THINGDIR c:\thing\thing                                  "
```

Sam tells everyone who helped him out:

"Just to let everyone know...I now have mint,xaaes, and thing all working...woohoo!!!!!!!!!! Now the only problem I seem to be having is with the xaaes file selector. It will show my drive c, so how do I get it to show me any other drives?"

More on the file selector/drives question next week.

'Mark' tells us that he....

"Used to use Pacifist on old 166MMX laptop with W98 . Now got a Thinkpad T23 at 1.3Ghz and XP and the older Pacifist setup won't run. So, what is the best emulator for the faster setup please and where to locate it?"

Francois LE COAT tells Mark:

"http://aranym.atari.org is the best ... Depending on what you want to do with your ATARI box ... Would you mind a Falcon 060 on your system?"

Martin Tarenskeen agrees with Francois:

"Yes, Aranym is great. I'm using it all the time. But for older ST games and MIDI software maybe STeem is the first choice. You should be able to find the STeem site with a little googling. Or maybe there is a STeem user reading this group who can tell us more."

Mark Duckworth adds:

"Mark, I've had pretty good luck with Hatari under Linux. Not perfect, like you said, "ain't nothin' like the real thing baby!"."

Paul Williamson asks a very interesting question about 'dongles' for emulators:

"Does anyone know if it would be possible to build a dongle port onto a card which fits into a PCI slot on the PC, or even something to connect to a USB port ?

If this could be done, would it be possible for an emulator, such as Aranym, to address it and enable the use of Cubase Score ? The PC MIDI ports would also need to be addressed as well.

I have to accept that my Hades will not last for ever - it was repaired recently and, although usable, still has an intermittent fault. I have years of work (musical arrangements) which I have done in Cubase, and the files cannot be read by the PC version of Cubase. I would have to change

them all to standard midi files, and in so doing would lose all the score formatting information.

My Hades has an ISA dongle card, and this is addressed via the Hades B.inf file which allows the selection of one of three dongle ports on the card, so maybe that means it is possible to create add-on dongle ports.

I've never looked at using an emulator before, just because of being unable to use software which needs the dongle. Anyone else out there who would find this useful?"

Coda supplies a possible solution:

"I think its simpler just to find a cracked copy. Problem solved."

Paul tells Coda:

"Problem not solved! I have yet to hear of a cracked copy that is stable. I have no interest in spending hours working on a piece of software that is sure to let me down - beside which, it just happens to be illegal."

Lonny Pursell tells Paul:

"If someone can provide the file format specifications I'd gladly make you a tool to move them to some other format."

Mark Duckworth adds his opinion to the mix:

"Hardware wise, this isn't something that is terribly difficult. In fact, if it's a standard ISA card, the dongle card for your Hades should be usable on the PC. But like anything it all has the problem of getting old. Every single device, even a dongle card created today. The best thing you can do is have some redundancy. Keep a couple old ST's around to make sure you can rescue data. That's why I have something like 10 Atari machines. I know at least one will ALWAYS work."

Well folks, that's it for this week. Tune in again next week, same time, same station, and be ready to listen to what they are saying when...

PEOPLE ARE TALKING

=~=~=~=

->In This Week's Gaming Section - Games Targeting Adults!
  """""""""""""""""""""""""""""""   Great Year for Gamers!
                                     PSP Likely To Be Hit!

=~=~=~=

->A-ONE's Game Console Industry News - The Latest Gaming News!
"""""""""""""""""""""""""""""""""""""

Video Games Targeting Grownups

Shoppers browsing the video game aisles at electronics stores this holiday season are not just shopping for kids. Chances are good that they are looking to pick up a title or two for adults on their list.

And that is a good thing for the video gaming industry, Yankee Group's Mike Goodman told NewsFactor. The crucial hurdle for the industry to overcome is moving from what Goodman calls "hardcore gamers" to more mainstream technology consumers.

Last month, Microsoft released Halo 2, the much-anticipated sequel to its popular Halo game. The game went on sale at midnight on November 9th and set records. Halo 2, like many video games, is rated "M," which means it is intended for players 17 years old and above. Microsoft has counted on it to turbo-charge sales of its Xbox gaming console.

But competitors have their own adult-oriented games as well. Grand Theft Auto: San Andreas, for example, runs on Sony's PlayStation. It also carries an M rating and has created a stir over controversial and violent content. Other popular adult titles include Doom 3 and Half-Life 2.

The next frontier of online gaming, said Goodman, lies in enabling individual consoles to connect to the Internet to allow gamers to engage in multi-player action and publish additional content. Microsoft, with the Xbox, has used its own infrastructure, building its own online gaming site to which users can subscribe, a $200 million investment. Microsoft charges a subscription fee of US$49 per year.

Sony has taken a different approach. The company makes a network adapter available for its consoles, but it leaves the building and maintenance of Web sites to game publishers, giveing them an advantage, said Goodman. But from the user's perspective, the kind of aggregation that Microsoft accomplishes through its centralized site can be attractive.

2004 Was a Great Year for Gamers

Picking the year's best and worst video games can be a lot harder than playing them. 2004 was a great year for gamers, with some of the most anticipated games of all time being released.

But it wasn't all fun and games...

THE BEST:

1. Half-Life 2 (PC, $50): The first game to mold intense, varied action and

hyperreal sci-fi locales with such immersive mastery. Video games will never be the same with this latest chapter in the dangerous life of scientist Gordon Freeman. Hollywood, take note: The future of interactive entertainment has arrived, and it isn't showing on the silver screen.

2. City of Heroes (PC, $40): Finally, a maker of massively multiplayer online games got it right. "City of Heroes" tossed the dungeons and dragons in favor of superhero tights. It also dispatched with many of the genre's grueling "leveling up" aspects and let gamers do what they really want: band together with dozens of others to battle villains.

3. Burnout 3: Takedown (PlayStation 2, Xbox, $50): A gridlock victim's wildest dream come true. It stood out from other racers in 2004 by encouraging the one thing you're usually supposed to avoid - wrecking. With this game, the bigger the crash, the better. And few games conveyed the sense of blistering speed so well.

4. Grand Theft Auto: San Andreas (PlayStation 2, $50): Is it violent? Yes. Should children play it? Certainly not. For everyone else, it's an excellent game, packed with enough detail and action to keep you playing for months. The graphics are better than previous versions, but what made this gang saga so compelling was the story and characters.

5. ESPN NFL2K5 (PlayStation 2, Xbox, $20): Die-hard Madden junkies will think I'm nuts, but ESPN reinvigorated the football video game genre this season by outrunning and outpacing Madden in a head-to-head bout. And it can't be said enough: it's only $20, still $10 less than the reduced price of its crosstown rival.

———

THE WORST:

1. JFK Reloaded (PC, $9.99): Among the worst ideas for a game, ever. Downloadable and despicable, it lets you test your aim as the infamous gunman in President Kennedy's assassination. The British-based creator calls it an educational "docu-game." What's next, a docu-game of Christ's crucifixion where you test your nail-hammering skills?

2. The Guy Game (PlayStation 2, Xbox, $40): If 2004 was the year of the sequel, it was also the year when video game makers used sex more than ever. Topping the trash-heap of soft porn games was "The Guy Game." In a deviant twist on the quiz show format, players guessed if bikini-clad women on spring break were sober enough to correctly answer trivia questions. The more wrong answers these women provided, the less clothing they wore. AP reviewer Nick Wadhams said it best: "Calling this demeaning is like saying anteaters' favorite food is ants."

3. Terrorist Takedown (PC, $19.99): I have no problem with budget titles, and "Terrorist Takedown" might seem like a good deal. That would be incorrect. When this bug-ridden title worked properly (and that was rare), all you had was repetitive target practice in a Middle Eastern setting, where you blow away throngs of lookalike terrorists with machine guns and artillery. With no actual fun, I masochistically accepted the many glitches. Highlights: buildings popping in and out of existence, missing artwork and oddly moving chunks of ground.

4. Lifeline (PS2, $40, plus required USB microphone headset): It's hard to criticize a game that at least tries to be innovative. Instead of the standard controller, you had to use a microphone headset and verbally issue

orders to control your character, named Rio. Problem is, Rio was a terrible listener and even the most mundane tasks devolved into shouting matches between me and the game. Great for drill sergeants, but not for me.

5. Spider-Man 2 (PC, $20): A pretty good game so long as you played on PlayStation 2, GameCube or Xbox. But the PC edition was a lame, side-scrolling affair that lacked the freeform exploration and gravity-defying action of the console version. In this era of sequels, why go through the extra effort of creating a bad game when a great one already existed?

PlayStation Portable Likely to Be Big Hit

Even if you don't particularly like video games, you'd best resign yourself to what appears certain to anyone who's spent a little time with Sony's new PlayStation Portable: This is a gadget that's likely to eventually become a worldwide household hit. That holds true especially if your household includes, as mine does, a young man who grew up with the original PlayStation.

Yet while the PSP is a dazzling game machine, delivering sharp graphics on a 4.3-inch display and weighing just 10 ounces, it is also a multimedia player designed for music and movies.

And within the sleek, black plastic shell of this 7-inch by 3-inch wonder, there is Wi-Fi wireless connectivity and a USB 2.0 port for mating with computers.

The only big drawback is Sony's decision to go with a proprietary format for the PSP's main media: a 1.8-gigabyte disc the size of an Olympic medal. It's dubbed UMD for Universal Media Disc.

That's what the games come on - and Sony Corp. promises to also deliver Hollywood movies on the discs, though it hasn't said when or offered a lineup.

The PSP went on sale in Japan this month and won't be available in the United States and Europe until next year. It's likely that the U.S. price will be similar to the $190 the device costs in Japan. That feels like a bargain to anyone who remembers paying more than $299 for the original PlayStation in the mid-1990s.

But then, the PSP has a competitor this time around in Nintendo's DS handheld. Perhaps that's why the PSP is stoked with enough technology to be worth twice its price tag - it's got a Memory Stick slot for storing music and photos when the 32 megabytes of onboard memory don't suffice. You'll have to buy the Memory Stick, though.

There's good news, also, for music fans who prize to open MP3 standard for music. Sony formerly pushed its ATRAC proprietary standard. No longer. The PSP is an MP3 adherent, and its sound quality is quite good.

If you want to play video that doesn't come on a UMD disc, Sony recommends you buy special $10 computer software that will convert it to the MPEG-4 video format that the PSP and Memory Stick support.

Because of its networking capabilities, the PSP looks to have an edge on

Nintendo DS. The new Nintendo handheld works strictly as a game machine.

As for recording your own content for playing on the PSP, Sony hasn't said whether it will sell recordable versions of UMD discs.

PSP games range in price from $24 to $46, but unfortunately there aren't many yet. About a dozen are available so far in Japan, including "Hot Shots Golf" from Sony Computer Entertainment and "Vampire Chronicle: The Chaos Tower" from Capcom Co.

Sony says some 100 games are in the works, with about 20 titles promised by the end of the year.

By contrast, about 15 Nintendo DS games are on sale in Japan so far. But Nintendo DS, which costs about $145, can also play all the Game Boy Advance games.

In the games I played on the PSP, the attention to detail in the graphics was impressive.

In scenes from "Ridge Racers" made by Namco Ltd., camera flashes blink from roaring crowds and frothy waves break on sandy beaches. I found myself pushing on the joystick button for steering until my thumb got sore, happily tilting the PSP with the twists and turns as roaring race cars zipped through a swerving course, screeching on corners and sending tire-skidding virtual sparks on the screen.

The display, from Sharp Corp., is surprisingly easy on the eyes. The removable Lithium Ion battery lasts about four to six hours for games on a single charge. And the built-in 802.11b Wi-Fi chip allows up to 16 PSPs to play together.

PSP also has a microphone slot for future software with voice-recognition and an infrared connection whose uses aren't yet spelled out.

My son needed just a few minutes of checking out PSP before deciding he's definitely going to buy one.

Never mind that he isn't exactly sure how he's going to use its non-game functions (He's already got an iPod, a digital camera, a cell phone and a laptop).

Don't worry, mom, he said, everybody is going to figure it out.

=~=~=~=

A-ONE's Headline News
The Latest in Computer Technology News
Compiled by: Dana P. Jacobson

European Court of Justice To Announce Microsoft Verdict

A European Union court is to issue its initial verdict in an antitrust case

pitting US software giant Microsoft against the EU’s executive commission, the European Court of Justice revealed.

It said its Court of First Instance would deliver a ruling on Wednesday on Microsoft’s request that "corrective" measures imposed on it by the commission for having abused its dominant market postion be suspended.

The commission last March imposed a record fine of 497 million euros (665 million dollars) on the company on grounds that it had engaged in anti-compeititve practices. Microsoft has since paid the fine into an escrow account pending the outcome of an appeal.

The panel also determined that the company had to offer a European version of its Windows operating system without its Media Player software, which offers access to audio and video content.

Brussels also ordered Microsoft to provide competitors with the information they need to enable their products to communicate with Windows.

Microsoft reponded by seeking first of all the cancellation by the court of the commission’s decision and secondly - in the matter that will be decided Wednesday - a suspension in the corrective measures until a judgement on the merits of the case.

The company is fiercely opposed to any measures that could affect its core strategy, which is based on the integration of new features into its Windows operating system.

European Court Rejects Microsoft Appeal

Microsoft will begin immediately to comply with sanctions imposed by the European Commission, following a decision handed down today by Europe’s Court of First Instance (CFI), but the company still holds out hope that it eventually will be vindicated.

The CFI denied Microsoft’s appeal and confirmed that the software giant must offer an unbundled version of Windows, without Windows Media Player, and must make available to its competitors technical details necessary to allow non-Microsoft work group servers to achieve interoperability with Windows PCs.

In effect, the decision means that Microsoft now has to allow European consumers to buy its operating system with such multimedia software as RealNetworks’ RealPlayer and Apple’s QuickTime. Microsoft said it would comply beginning in January 2005. In addition, Microsoft will be forced to share data protocols and other proprietary specifications with its competition.

In a conference call with reporters this morning, Brad Smith, Microsoft’s general counsel and senior vice president, said the company is now offering a Web site where competitors can get information on its communications protocol licensing, and will release in January in Europe a version of Windows that meets European Commission demands.

"First and foremost, we have to comply with the court’s ruling," Smith said. At the same time, he noted that the CFI recognized that some of the company’s arguments on the merits of the case are valid and may ultimately

prevail upon the full appeal.

"The court noted that it is appropriate to have safeguards for the licensing of communications protocols, and that our practices do not restrict competition," said Smith. The integration of new features in the operating system is a long-standing practice, benefiting both users and developers, Smith said in citing the court decision.

The European Commission determined in March that Microsoft was guilty of antitrust abuses, following a five-year investigation of the company's business practices and product configurations.

In that ruling, the commission mandated that Microsoft strip Media Player from its Windows operating system and share information with competitors. It also imposed a fine of US$497 million. The commission argued that consumers and computer manufacturers need a choice between taking Windows with WMP or with a different media player.

Since then, the company has reached settlements with several prominent adversaries, including Novell, Sun Microsystems and Time Warner. Microsoft argued that with these competitors now satisfied, there is less need for the Commission to pursue its litigation.

Smith suggested that Microsoft may take its case to the European Court of Justice, saying that while no decision has been made to pursue the issue, "clearly there is a case for optimism as the litigation path moves forward."

Microsoft says in a statement: "We continue to believe that the commission's remedies will bring very few benefits to competitors and consumers in Europe, and will in fact harm many users of the Windows operating system and the thousands of companies across Europe who have built their businesses on the Windows platform."

Along with limiting industry opposition, Microsoft is prepared to continue the fight against sanctions to protect its business, Yankee Group analyst Laura DiDio told NewsFactor.

"Microsoft will fight hard on this one," she said. "They feel that the EU could affect their products in Europe, and that includes the future line as well as current products. This involves trade agreements and international treaties, so it involves much more than Europe."

Judge Nixes Guilty Plea in AOL Spam Case

A federal judge refused to accept a guilty plea Tuesday from a former America Online software engineer accused of stealing 92 million e-mail addresses and selling them to spammers.

Judge Alvin Hellerstein of Manhattan federal court said he was not convinced Jason Smathers, 24, had actually committed a crime under new federal "can-spam" legislation that took effect earlier this year.

Smathers, of Harpers Ferry, W.Va., planned to enter guilty pleas to charges of conspiracy and interstate transportation of stolen property. But the judge turned him away and scheduled another hearing for January.

Under a plea deal worked out with federal prosecutors, Smathers faced a potential prison term of 18 months to two years, plus fines.

The judge, who said he dropped his own AOL membership because he received too much spam, said it was not clear that Smathers had deceived anyone - a requirement of the new law.

Federal prosecutor David Siegal urged the judge to accept Smathers' guilty plea, saying "billions and billions of unsolicited e-mails" had been sent to "people like Your Honor" because of Smathers' conduct.

"Everybody hates spamsters, there's no question about that," Hellerstein said. But he added: "I'm not prepared to go ahead, Mr. Siegal. I need to be independently satisfied that a crime has been created."

Smathers' lawyer, Jay Goldberg, said the judge did not appear to be questioning the constitutionality of the "can-spam" law itself, which took effect Jan. 1.

"He is questioning whether the conduct here met the standard of deception," he told reporters outside court. Smathers himself declined comment.

Hellerstein asked lawyers for the government to file a brief by Jan. 12 spelling out why Smathers can be prosecuted under the law - why his conduct was deceptive, not just fraudulent.

He set a hearing for Jan. 28. Goldberg told reporters there was a chance his client would withdraw his guilty plea altogether, but said he would wait and see what the government turned in.

Authorities said Smathers, who was fired by AOL in June, used another employee's access code to steal the list of AOL customers in 2003 from its headquarters in Dulles, Va., and sold it to spammers for more than $100,000.

Court papers said Smathers sold the list to Sean Dunaway, of Las Vegas, who used it to send unwanted gambling advertisements to subscribers of AOL, the world's largest Internet provider.

Charges are still pending against Dunaway.

The stolen list of 92 million AOL addresses included multiple addresses used by each of AOL's estimated 30 million customers. It is believed to be still circulating among spammers.

The "can-spam" legislation, modeled after the government's popular do-not-call telephone list, is designed to cut down on unsolicited e-mail messages trying to sell products, from Viagra to home mortgages.

In September, a California man pleaded guilty under the "can-spam" law after federal prosecutors accused him of sending unsolicited e-mails, some for pornographic Web sites.

Prosecutors said they believed the plea was the first under the act.

ISP Awarded $1 Billion in Anti-Spam Suit

A federal judge has awarded an Internet service provider more than $1 billion in what is believed to be the largest judgment ever against spammers.

Robert Kramer, whose company provides e-mail service for about 5,000 subscribers in eastern Iowa, filed suit against 300 spammers after his inbound mail servers received up to 10 million spam e-mails a day in 2000, according to court documents.

U.S. District Judge Charles R. Wolle filed default judgments Friday against three of the defendants under the Federal Racketeer Influenced and Corrupt Organizations Act and the Iowa Ongoing Criminal Conduct Act.

AMP Dollar Savings Inc. of Mesa, Ariz., was ordered to pay $720 million and Cash Link Systems Inc. of Miami, Fla., was ordered to pay $360 million. The third company, Florida-based TEI Marketing Group, was ordered to pay $140,000.

"It’s definitely a victory for all of us that open up our e-mail and find lewd and malicious and fraudulent e-mail in our boxes every day," Kramer said after the ruling.

Kramer’s attorney, Kelly Wallace, said he is unlikely to ever collect the judgment, which was made possible by an Iowa law that allows plaintiffs to claim damages of $10 per spam message. The judgments were then tripled under RICO.

"We hope to recover at least his costs," Wallace said.

There were no telephone listings for the three companies in Arizona and Florida. Nobody replied to an e-mail sent Saturday to Cash Link Systems.

According to court documents, no attorneys for the defendants were present during a bench trial in November. The lawsuit continues against other named defendants.

Laura Atkins, president of SpamCon Foundation, an anti-spamming organization based in Palo Alto, Calif., said she believed it was the largest judgment ever in an anti-spam lawsuit.

"This is just incredible," she said. "I’m not aware of anything that’s been over $100 million."

Real Answers Needed to Solve Spam

Spam gained a nefarious twist this year with the development of phishing scams, but phishing wasn’t the least of IT departments’ problems. They faced numerous roadblocks to protecting user in-boxes from unwanted e-mail.

Next year, solutions to many of these problems-including how to reliably identify e-mail senders and what, exactly, must be done with the mail protocol-should be forthcoming. But vendor squabbles-often reflected in the lassitude of standards bodies-likely mean that e-mail will remain an essential but increasingly burdensome business tool.

The only thing that seemed to match the spam proliferation rate during the last year was the dizzying number of anti-spam vendors hawking goods

designed to thwart unwanted e-mail. An industry consolidation seems inevitable.

However, the tremendous variety of anti-spam consumers-from large enterprises that often go with a stand-alone anti-spam appliance to small and midsize organizations drawn to outsourced anti-spam services or anti-spam software that integrates directly with the e-mail server-means that many spam-stoppers will likely be around for much of 2005.

Based on anti-spam tests I've conducted in the last couple of years, it's clear that most anti-spam vendors are generally successful at clearing spam out of the incoming mail stream.

For now, this means IT managers who are shopping for anti-spam protection should take advantage of the crowded field to get the best price per mailbox.

However, this doesn't mean that all anti-spam products are equally effective. Aside from platform (appliance, service or software), the biggest differentiator among spam systems is the amount of time it takes to maintain them. Anti-spam tools that require lots of user involvement over a sustained period of time should be scrapped.

Likewise, systems that require administrators to do much more than occasionally print spam catch-rate reports (that is, those that require administrative involvement to resurrect "good" e-mail that was mistakenly marked as spam) should get the heave-ho.

SMTP, the IP upon which e-mail is based, does not provide a reliable way to identify the sender of a mail message. Correcting this fundamental flaw won't, in and of itself, stop spam.

However, sender authentication is essential for any of the anti-spam technologies that have been developed thus far to continue being effective. These technologies include Bayesian filtering, reputation measurement, address-book acceptance lists, call-to-action triggers and even simple keyword filtering.

This is why it was so disheartening to see MARID (MTA Authorization Records in DNS), the IETF Mail Transfer Agent Authentication in the DNS Sender ID scheme, crash in flames this fall. So far, no concerted, industrywide effort seems to have coalesced to pick up the banner of sender authentication.

This means it will be another great year to be in the spamming business, and IT managers are going to have to go with the flow as anti-spam vendors continue to attempt to outwile the voraciously wiley spammers. Until sender authentication is established, the need to update anti-spam systems will be relentless.

Thank goodness the anti-spam vendors seem up to the task of finding ever-more-clever ways of sorting good e-mail from bad.

Hackers Aim to Sabotage Holiday Computing

Hackers, spammers and spies go into overdrive in December and January, when unsuspecting neophytes unwrap new computers, connect to the Internet, and,

too often, get hit with viruses, spyware and other nefarious programs.

"People want to get on the Net right away, just like they want to put together and start using any Christmas present," said Tony Redmond, chief technology officer of Palo Alto, Calif.-based computer giant Hewlett-Packard Co., whose new PCs ship with 60 days of virus and adware protection. "They should be warned that the Net is a very, very dangerous place."

Susan Love’s problems began with a smile.

The New York City fund-raiser clicked on a happy-face attachment in a friend’s e-mail last year. The virus crashed her computer within an hour.

Love, 57, salvaged her data. But within a few months her computer’s performance slowed to a crawl. In December 2003, she upgraded to a Sony Vaio with an extra-large monitor and Microsoft Windows XP operating system.

Within a few days, "spyware" - programs that sneak onto computers uninvited - began sponging up valuable memory. Then her e-mail stopped arriving.

Instead of crafting holiday e-mails, she spent hours installing the latest antivirus, anti-advertising and anti-spyware software. She also instituted a rule: Her computer never gets turned off, so security programs patch vulnerabilities around the clock.

"You have to become something of a nerd to make sure your computer is safe," said Love, a former English teacher who recently installed anti-adware on her daughter’s computer. "If you don’t sweep the computer every night, you could hit."

Love won’t be the last to get a holiday crash-course in computer security.

Although few researchers produce holiday-specific security data, experts at IBM Corp., Dell Inc., Hewlett-Packard Co., software companies and Internet service providers agree that the holidays are prime time for hackers.

Holiday viruses are so rampant that consumers could be attacked even if their first online destination is to a Web site for updating security patches.

Kris Murphy, help desk coordinator for North Carolina Internet service provider Indylink.org, said his minister got attacked last year, only a few minutes after unpacking and connecting the machine. At the time of infection, the minister was updating security patches to Windows.

"Hackers know that you are most vulnerable as soon as you go online for the first time," said Murphy, whose 10-person company hires temp consultants during the holidays to handle higher call volume. "Inexperienced people tend to fall into traps more readily because they don’t recognize that this guy might be trying to get your credit card information."

Technology executives describe the relationship between hackers and security programmers as an arms race - both sides keep ratcheting up fire power. But lack of consumer awareness - if not downright naivete - allows the war to escalate.

According to a recent survey by the National Cyber Security Alliance, of

the 185 million Americans with home computers, one in three say they'll never get hit by viruses or other cyber attacks. In a Consumer Reports study, 36 percent of U.S. home computers showed signs of being infected with spyware and only 41 percent of surveyed households said they actively try to prevent it.

American businesses are savvy about firewalls, spam filters, multiple passwords and other network protections, said Stuart McIrvine, director of corporate security strategy at IBM. But problems at the consumer level - from spyware to security risks in coffee shop wireless networks - are so severe that every hardware and software vendor should be worried about a backlash.

Seasonal attacks start around Thanksgiving, when online shopping begins an annual spike and marketers pummel consumers with junk e-mail - from the perfect stocking stuffer for a balding spouse to a limited-offer holiday cruise.

With the rise in e-commerce, identity thieves try even harder to obtain credit card and other financial data from wireless and home networks. They set up dummy Web sites that seem to be hosted by major financial institutions in hopes that gullible consumers will provide their account information.

Virus writers hide viruses and worms in holiday-themed e-mails, seasonal greetings cards and screensavers.

"W32/Zafi-D," a mass mailing and peer-to-peer worm, harvests addresses from Windows address books and other files. Infected e-mails' subject line begins, "Merry Christmas!" and the text reads, "Happy Hollydays."

The most vulnerable computers are the ones that have sat under Christmas trees for days or weeks. If a consumer buys equipment that arrives on Dec. 15, and it sits in the living room until Dec. 25, it could be hit by hundreds of viruses written in the 10-day interim.

Tony Ross, analyst at British security firm Sophos Plc., advised consumers to get a CD-ROM with the newest updates from their electronics vendor, next-door neighbor or the computer at their office before connecting to the Internet. They should prohibit children - who tend to be liberal in distributing their personal data - from using the machine until it's patched.

Consumers should vigilantly buy and update security software, which can add hundreds of dollars over the course of a computer's lifetime. Popular anti-spyware and anti-adware programs include Webroot Software Inc.'s Spy Sweeper ($29.95 for a one-year subscription), LavaSoft's Ad-Aware SE Professional ($39.95), Tenebril Inc.'s SpyCatcher ($29.95), the free Spybot Search & Destroy and Computer Associate Inc.'s eTrust PestPatrol ($39.95).

Some experts wonder whether the computer has become the digital age equivalent of a puppy - an enthralling treasure on Christmas morning, but a sinkhole for time and energy for years after. At very least, computers are far more demanding than the typical holiday toy, which merely requires batteries.

"At some point, people who receive them for Christmas often ask, 'Is this computer a gift or a curse?'" Ross said.

Popular File-Sharing Site Shuts Down

One of the Web's most popular file-sharing sites has shut down less than a week after Hollywood announced a flurry of lawsuits against operators of such Internet servers.

A note posted on Suprnova.org, which facilitated sharing among users of the BitTorrent program, said the site was "closing down for good." The collection of links to downloadable files, including music, movies and books, was taken down.

"We are very sorry for this, but there was no other way, we have tried everything," the statement said.

Reached via Suprnova.org's chat room, the site's anonymous operator refused to comment on why it had shut down.

Last week, movie studios sued more than 100 operators of U.S. and European sites that host BitTorrent links but did not name the defendants.

Suprnova.org was the most popular repository for links to files that could be downloaded using the BitTorrent program.

Another site that carried BitTorrent links, N4p.com, said it had shut down due to a civil complaint that cited the Digital Millennium Copyright Act. Torrentbits.org and Phoenix-torrents.com also shut down.

Still, there were plenty of sites with BitTorrent links alive on Monday, including a "mirror," or copy, of Suprnova.org.

BitTorrent has grown quickly in popularity this year, and now accounts for more than a third of all traffic on the Internet, according to the research company Cachelogic.

The program owes its popularity in part to its immunity to industry attempts to confound it with bogus decoy files, which have swamped some other networks. BitTorrent also allows for efficient and speedy downloads.

The Motion Picture Association of America last week said it is planning similar action against operators of servers that direct data for the DirectConnect and eDonkey file-swapping services.

Apple Sues Three for Posting Mac OS X on Net

Apple Computer Inc. has sued three men for illegally distributing test copies of the next version of its Mac OS X operating system on a file-sharing Web site, court records showed on Tuesday.

The lawsuit is the second in as many weeks by the maker of the popular iPod digital music players and iconic Macintosh personal computers to thwart the release of its software and details of its unannounced products.

Apple claims in its suit that two different versions of Mac OS X, code-named Tiger, were made available on the Web on or about Oct. 30 and

Dec. 8 of this year.

The company has said it will ship Mac OS X "Tiger" in the first half of 2005, after previewing it to the Mac community at a trade show last June.

Apple makes test versions available to certain software developers under strict confidentiality conditions and lets them test the prerelease software and develop or change their own programs to work with the software.

The company said in its lawsuit that the two different versions were made publicly available by the men, who were members of the Apple Developer Connection.

"Members of Apple Developer Connection receive advance copies of Apple software under strict confidentiality agreements, which we take very seriously to protect our intellectual property," the company said in a statement.

According to the suit, the men released the software on a Web site that employs BitTorrent file-sharing technology, which is used to rapidly distribute large files of electronic data, and is also widely used to distribute pirated copies of motion pictures via the Internet.

"Apple’s future operating results and financial condition are substantially dependent on its ability to continue to develop improvements to the Mac OS and related software applications in order to maintain perceived design and functional advantages over competing platforms," the company said in its civil complaint, filed on Monday in the U.S. District Court, Northern District of California, San Jose.

Apple’s Macintosh computers and Mac operating system compete principally with personal computers using Microsoft Corp.’s dominant Windows operating system. Apple currently has a less than 5 percent share of the overall PC market.

On Dec. 13 Apple, based in Cupertino, California, filed a lawsuit against unnamed individuals who leaked details about new products by posting information on the Internet.

The lawsuits come weeks ahead of the Macworld conference in San Francisco, the annual show where Chief Executive Steve Jobs typically unveils the latest Apple products in front of thousands of the Mac faithful.

Google Smacks Down Santy Worm

Web search engine company Google is blocking efforts by a new Internet worm to use its search engine to find vulnerable computers on the Internet, the company announced this week.

Google is blocking searches launched by Santy.A, a new Internet worm that targets servers running phpBB, a popular electronic bulletin board software package, according to a statement from the company. Without any native ability to scan for vulnerable computers, Google’s action halted Santy.A’s spread, according to antivirus companies.

Santy.A targets servers running phpBB. Antivirus companies first detected

the worm Tuesday, though it may have been spreading silently well before that, according to Johannes Ullrich, chief technology officer at The SANS Institute's Internet Storm Center.

The worm used a vulnerability in phpBB, an open source software product that is managed by the phpBB Group, to spread across the Internet, infecting computer servers that host online bulletin boards and defacing those sites with the words "This site is defaced!!! NeverEverNoSanity WebWorm."

A phpBB component called viewtopic.php allows malicious commands to be passed to and executed on servers that run a vulnerable version of the phpBB software. Secunia, a Copenhagen-based security company, first reported the vulnerability on November 19. An updated version of phpBB software that fixes the flaw was released on November 18.

Estimates of the impact of the Santy worm vary widely. Searches on a beta version of Microsoft's MSN Search feature for the text used to deface sites returned over 30,000 hits. However, identical searches on other engines, including the official MSN Search engine, Yahoo, and Google search engines returned far fewer hits, ranging from 785 (MSN) to 2030 (Yahoo).

However, using searches for telltale signs of infection, such as defacement text, is an inexact way to determine the actual number of Santy infections, says Ullrich.

"Santy will only deface sites if it can overwrite files, and it may not always be able to do that based on the configuration of the Web server [running phpBB]," he says.

Also, an analysis of the Santy code revealed that the worm spread quietly for a while, infecting phpBB servers but not overwriting files and defacing the bulletin boards, Ullrich says.

The Santy worm marked some firsts, including the use of a popular search engine as part of a worm's spreading mechanism. However, the lessons to be learned from Santy's spread are already well established: keep on top of software patches and "harden" the configuration of public-facing servers by preventing users from being able to take unnecessary actions, such as overwriting files, he says.

AOL Tests Free Web Mail Service

America Online is experimenting with a new version of its e-mail offering, with an eye on delivering Web-based mail to the masses at no charge and keeping pace with competitors Yahoo, MSN and Google.

On Wednesday, AOL began beta testing the new version of AOL Mail on the Web for a select number of members, company spokesperson Jaymelina Esmele told NewsFactor, calling it "a significant upgrade for the product."

Among the features being tested are a revamped user interface, performance enhancements that make it quicker for members to access mail, and improvements designed to make it easier for AOL members to manage their mail on the Web, said Esmele. Further details are not being divulged at this time, she added.

"This service will be available to AOL members next year and lays the foundation for the free Web mail service we plan to offer to a wider audience in 2005," Esmele said.

Such a move would help boost the Internet portal's subscriber base and counter the offerings of AOL's rivals. Yahoo now offers e-mail users 100 megabytes of storage for free. Those willing to pay a subscription price will have access to 2 gigabytes of storage space and other services.

Microsoft, too, has increased the amount of storage it provides to users of its free Hotmail service to 250 megabytes, and also will add antivirus scanning.

The primary objective is to fend off a challenge from Google, which is testing a free e-mail service with a full gigabyte of storage capacity, representing some 500,000 pages.

The battle for free e-mail highlights the falling cost of storage capacity, but also a rush to direct customers to portals and search services, which can generate revenue.

"The Internet portal and search-engine market, in general, is becoming increasingly competitive," Yankee Group analyst Patrick Mahoney told NewsFactor. "All of them are looking for any way to differentiate themselves, to garner more customers or keep current customers satisfied."

Within the space of a few months, free e-mail with large amounts of storage has become the de facto minimum standard for Internet content providers, such as Yahoo, AOL and Google, which is not necessarily good news for the companies.

E-mail accounts, at one time, were considered a revenue source for these providers, Mahoney noted. The premium accounts still will be, of course, but given the storage available in the free accounts now, the paying accounts will represent a much smaller portion of revenue.

First Look: Thunderbird 1.0 a Winner

If you find yourself spending more time sorting your e-mail than reading it, consider the Mozilla Foundation's new Thunderbird e-mail client. The free program, which complements the group's Firefox browser, combines advanced e-mail sorting functions, first-rate spam filters, and lightning-fast performance to help you cut through your inbox like a hot knife through butter.

I tested version 1.0 of Thunderbird (a 5.8MB download). After years of using Microsoft Outlook, the switch was like trading in a big, lumbering Buick for a Mustang GT. A mere second after you launch the program, it's ready to retrieve your mail or compose a message. With Outlook, you launch the app and then go get a cup of coffee while it loads its numerous modules and applets.

Thunderbird's interface is equally sleek, borrowing many of the best elements of its sibling Firefox. The icons are stylish yet easy to identify, and navigation is simple and efficient. Best of all, you're not bombarded with anything like Outlook's quasi-advertising links and toolbar items.

Like most people, I’m in too much of a hurry to create a nice, neat folder hierarchy for my received e-mail, so I tend to keep all my messages in the inbox. That’s why my favorite Thunderbird feature - and the one that may get me to dump Outlook for good - is the ability to create custom views of the inbox based on easy-to-set rules.

For example, I created a "Family view" that shows only messages from people in my personal address book named "O’Reilly" (I could add other names or conditions to this rule as well). Now when I want to see only messages from my family, I simply click the View drop-down menu and select "Family view."

Of course, any e-mail program worth its salt today has to be able to handle spam, too. Thunderbird’s Junk Mail Controls include adaptive filters that are trained to identify spam based on the contents of your incoming messages. The feature also helps keep viruses off your system by blocking JavaScript from executing in news and mail messages.

Thunderbird supports all POP3 and IMAP e-mail accounts, as well as AOL Mail and HTML mail. Users of Netscape Webmail or Microsoft Hotmail need to download free plug-ins available through the Mozilla.org site.

In addition to e-mail, Thunderbird offers support for newsgroup access and includes an RSS news reader. The program has a basic Address Book, but it lacks a calendar.

Despite Thunderbird’s open-source underpinnings and collective development, the program’s documentation is sparse. The link in Thunderbird’s Help menu to the support Web site was broken each time I tested it, too.

The program shows its 1.0 nature in other ways, as well. For example, when I entered contact information in my Personal Address Book entries, the cursor continually disappeared, and my first attempt to save a contact record failed.

Still, Thunderbird proved robust enough to become my number one e-mail client in no time. I don’t use Outlook’s calendar feature, so Thunderbird’s lack of one doesn’t bother me. I can say unequivocally that if you’re still using Microsoft’s outdated Outlook Express, you should switch to Thunderbird immediately - no questions asked.

With Thunderbird version 1.0 the Mozilla Foundation has created a fast, simple, and fully functional e-mail client. The fact that it just happens to be free is icing on the cake.

E-mail client is fast, functional, and free; but documentation is scarce and there are still a few bugs.Street: Free to downloadhttp://www.mozilla.org/products/thunderbird/

Google/Yahoo Rivalry Moves Into 2005

Even as they trade counterpunches punctuating their similarities, Internet heavyweights Google Inc. and Yahoo Inc. have strived for different goals - distinctions that may become more apparent as the fierce rivalry moves into 2005.

Google, owner of the leading online search engine, is devoted to a

single-minded mission: transforming the way the world finds and stores information, even if that means sending people somewhere else.

Yahoo, owner of the world's most popular Web site, is taking a more multidimensional approach as it strives to be all things for all people - a one-stop destination for recreation, work and research.

"The differing visions of the companies' founders and management teams will likely lead them down very different paths," UBS analyst Benjamin Schachter predicts in a recent research report.

The philosophical contrasts already influence how the rapidly growing companies spend the money that's cascading into their bank accounts.

Mountain View-based Google devotes significantly more of its budget to research and development, with more than $300 million - about 30 percent of its operating cash flow - earmarked for capital expenditures this past year. Meanwhile, Sunnyvale-based Yahoo is expected to spend $215 million to $235 million on capital expenditures, or about 20 percent of its operating cash flow.

Schachter believes the capital expenditure gap will widen in 2005 when he projects Google will spend $450 million while Yahoo allots about $250 million. If those estimates pan out, Google's capital expenditures, broken down as a percentage of operating cash flow, will be similar to such technology leaders as Microsoft Corp. and Intel Corp.

Google also takes a more laissez faire approach toward innovation, embracing new ideas and products long before the company's management figures out how everything fits into the overall business plan.

"We are compiling this collection of very cool technologies and taking our sweet time figuring out what to do with them," Google chief financial officer George Reyes said during an investment conference in early December.

The strategy has produced an exotic casserole that includes e-mail, shopping and news services, three-dimensional maps, digital photography, tools for creating Web logs, or blogs, and software for searching the information stored on computer hard drives.

Yahoo takes a more practical approach to technology, first identifying what people want and then building or buying a product designed to give visitors one less reason to leave its Web site - already the world's most popular online destination.

Yahoo wants to be "essential to people's personal and professional lives," spokeswoman Mary Osako said.

The emphasis has pushed Yahoo into territory that Google hasn't tread upon. The list of Yahoo services unavailable at Google include instant messaging, music, gaming, fantasy sports leagues, job placement, matchmaking and broadband service.

While it offers free versions of all its services, Yahoo constantly looks for ways to charge its visitors for extra bells and whistles. Google, in contrast, gives just about everything away except a recently acquired 3-D mapping product called Keyhole, which charges $29.95 for its basic software.

As it continues to sprout more tentacles, Yahoo is morphing into a media company and its 7,000 employees vastly outnumber Google’s 2,700 workers.

Yahoo already promotes heavily to spread its message, spending $551 million, or 22 percent of its revenue, on sales and marketing through the first nine months of 2004.

Google so far only has bought ads to attract job applicants. Through the first nine months of 2004, Google spent $170 million, or 8 percent of its revenue, on sales and marketing.

With so many more things to do on its site, Yahoo’s fortunes are tied more closely with the switch from slower dial-up Internet connections to higher speed broadband services. Web surfers with broadband already spend 22 percent more time on Yahoo’s site than visitors using dial-up, Schachter said. Broadband users spend 3 percent more time on Google’s bare-bones site.

Like Yahoo, Google shares one key characteristic with media companies - virtually all of its sales come from advertising. But Google prizes innovation over profits.

"In some businesses, the salespeople tell the engineers what to do, but at Google the engineering team is really our driving force" said Marissa Mayer, the company’s director of consumer Web products. Google is trying to foster a research-driven culture akin to General Electric Co., 3M Co. and DuPont Co., Mayer said.

Yahoo also has its geeky side, perhaps best embodied by the company’s co-founders, former Stanford University computer graduate students Jerry Yang and David Filo. After starting Yahoo in 1995, Yang and Filo later encouraged two other Stanford computer graduate students, Larry Page and Sergey Brin, to continue developing the search engine that became Google.

Although the two companies are no longer friendly partners, Yahoo still holds a substantial stake in Google.

Yahoo generated a $105 million profit by selling 2.3 million Google shares during the summer and still owns another 5.9 million shares - worth about $1 billion as of mid-December.

Yang and Filo have remained at Yahoo, but the company’s key decisions are made by a management team headed by former Hollywood movie mogul Terry Semel, who has also brought in several lieutenant with media backgrounds.

That list includes the recent hiring of former ABC television executive Lloyd Braun to oversee Yahoo’s entertainment division - a move that may foreshadow the company’s push to generate more of its own original content on its site.

Page and Brin have structured Google so they retain final say over all decisions. They run the company in collaboration with the company’s CEO Eric Schmidt, who holds a doctorate in computer science - a common thread at Google.

"We want Google to be the very place to work for the very best computer scientists in the world," Reyes said. "Google is truly a learning organization."

Microsoft’s Hotmail Drops McAfee Antivirus

Microsoft Corp. has switched from McAfee Inc.’s antivirus technology to Trend Micro Inc.’s for its free Internet e-mail service MSN Hotmail.

Under the agreement announced by Trend Micro Monday, it will provide anti-virus technology to some 187 million Hotmail accounts worldwide.

Santa Clara, Calif.-based McAfee’s technology was used to scan Hotmail’s attachments and e-mails. No reason was given for the change, and spokesmen for the companies weren’t immediately available for comment.

Scientists Seek to Forge Diamond Computer Chip

Only a few are singing about them yet, but it could turn out that diamonds are a computer’s best friend.

Damon Jackson is one researcher who sees the sparkling gems as a way to overcome the limitations of the silicon chips that serve as the brains of computers and the machines they run.

"It’s not a pie-in-the-sky idea," said Jackson, who works in the Lawrence Livermore National Laboratory east of San Francisco. "I would not be surprised at all, as more people start to look into this, if five or 10 years down the line that diamond would be a common material in a computer."

He showed off a microscope focused on a $1,500 natural diamond topped with a spiral of electronic circuits. On a second diamond, eight circuits pointed upward to the summit.

Electronics and the most treasured of jewels may appear an unlikely marriage but for the shortcomings of today’s chips and new advances in creating diamonds.

A conventional computer chip is a slab of silicon topped with millions of transistors - tiny switches that provide the computing power as electricity passes through them.

That blitz of electricity produces heat, a scourge of chip designers that may halt progress in making faster silicon semiconductors after a decade or so.

Enter the diamond, which already has a major presence in manufacturing because of its strength and extremely high melting point.

"You can operate a diamond-based transistor at higher temperatures than you could a silicon-based transistor," said John Venables, an advisor at the Pentagon’s Defense Advanced Research Projects Agency.

Venables was already predicting diamond computer chips in 1990, when he headed a National Academy of Sciences study. Skeptics say the failure of such expectations to materialize points to the significant obstacles in making diamond chips.

"It’s not on the mainstream radar screen," said Pushkar Apte, vice

president of technology programs at the Semiconductor Industry Association in San Jose, California.

Even now, Venables does not expect home computers to carry stickers saying "diamond inside" any time soon. Instead, he sees diamond chips in specialized devices like satellites, which have difficulty disposing of heat in space.

The price of such chips remains potentially daunting, but scientists hope new techniques in man-made diamonds will lower costs. "The initial cost is huge," Jackson said at Livermore. "Once it works, your cost per unit drops."

Jackson starts his work with a natural one-third carat diamond. Once he has put the circuits on it, he sends it to the University of Birmingham in Alabama, where Professor Yogesh Vohra patented a process to grow diamonds by essentially cooking methane and hydrogen gases in a very hot microwave oven.

Vohra seals the Livermore jewel with a man-made diamond layer. He foresees the eventual development of an entirely man-made diamond chip with the circuitry also made of diamonds.

"What we have done with Livermore is show that we could embed the electrical circuits on a high-quality diamond," he said, adding that engineering challenges make a full diamond chip unlikely before five or 10 years.

Serious work on manufactured diamonds dates back half a century, but scientists have seen growing success in recent years. Several private companies are already marketing the man-made gems.

Scientists are also working on using other materials - including other carbon-based compounds - to allow for continued fulfillment of Moore’s Law, which predicts that computing power will double roughly every two years.

With current technology, "we are rapidly approaching the time when the laws of physics will limit our implementation of Moore’s Law," Semiconductor Industry Association President George Scalise said recently. "We are now in a worldwide race to develop new technologies that will enable progress in semiconductor devices to continue at the pace we have seen for nearly 40 years."

=~=~=~=

Atari Online News, Etc. is a weekly publication covering the entire Atari community. Reprint permission is granted, unless otherwise noted at the beginning of any article, to Atari user groups and not for profit publications only under the following terms: articles must remain unedited and include the issue number and author at the top of each article reprinted. Other reprints granted upon approval of request. Send requests to: dpj@atarinews.org

No issue of Atari Online News, Etc. may be included on any commercial media, nor uploaded or transmitted to any commercial online service or internet site, in whole or in part, by any agent or means, without

the expressed consent or permission from the Publisher or Editor of Atari Online News, Etc.

Opinions presented herein are those of the individual authors and do not necessarily reflect those of the staff, or of the publishers. All material herein is believed to be accurate at the time of publishing.